UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,666	08/31/2001	Eleanor G. Rieffel	110012	7817

25944	7590	12/12/2005

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EXAMINER
BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
2672	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/942,666	RIEFFEL ET AL.
		Examiner	Art Unit
		Jeffery A. Brier	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 September 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-25,27-48,50-68 and 70-72* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-25,27-48,50-67 and 70-72* is/are rejected.

7)☒ Claim(s) *68* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   The amendment filed on 9/28/2005 has been entered.

Response to Arguments

2.   The arguments filed on 9/28/2005 have been fully considered and in view of the

amendments made to the claim the 102 rejection has been overcome. However a 102

rejection of new claim 71 is made since the snapshot recovery system in described in

the article meets the digital ink recovery system in the claim.

The argument concerning "at least one of" has been considered but in view of three

recent court decisions the meaning that applicant wishes to give to "at least one of" is

incorrect.

Superguide Corp. v. DirecTV Enterprises, Inc., 358 F.3d 870, 69 USPQ2d 1865, 1878

(Fed. Cir. 2004). Page 1878 states:

We agree with DirecTV. The phrase "at least one of" precedes a series of categories of
criteria, and the patentee used the term "and" to separate the categories of criteria,
which connotes a conjunctive list. A common treatise on grammar teaches that "an
article of a preposition applying to all the members of the series must either be used
only before the first term or else be repeated before each term." Willaim Strunk, Jr. & E.
B. White, *The Elements of Style* 27 (4th ed. 2000). Thus, "[i]n spring, summer, or winter"
means "in spring, in summer, or in winter." *Id.* Applying this grammatical principle here,
the phrase "at least one of" modifies each member of the list, i.e., each category in the
list. Therefore, the district court correctly interpreted this phrase as requiring that the
user select at least one value for each category; that is, at least one of a desired
program start time, a desired program end time, a desired program service, and a
desired program type.

IPXL Holdings LLC v. Amazon.com Inc., 72 USPQ2d 1469, 1480 (DC EVa 2004) makes

a decision similar to SuperGuide. Page 1480 states:

The parties dispute whether "user defined transaction information" requires both a "user defined transaction" *and* a "user defined transaction parameter" as Amazon contends, or only one of either a "user defined transaction" *or* a "user defined transaction parameter," as IPXL contends. For the reasons set forth below, the Court finds that IPXL misreads both the plain words used in the claim as well as Federal Circuit precedent in arguing for its interpretation. In construing the very same language, the Federal Circuit construed "at least one of" to mean what Amazon has argued.
The phrase "at least one of" precedes a series of categories of criteria, and the patentee used the term "and" to separate the categories of criteria, which connotes a conjunctive list. A common treatise on grammar teaches that "an article of a preposition applying to all the members of the series must either be used only before the first term or else be repeated before each term." William Strunk, Jr. & E.B. White, *The Elements of Style* 27 (4th ed. 2000).... . Applying this grammatical principle here, the phrase "at least one of" modifies each member of the list, i.e., each category in the list. Therefore, the district court correctly interpreted this phrase as requiring that the user select at least one value for each category... .*SuperGuide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 886 [69 USPQ2d 1865] (Fed. Cir. 2004).

CAFC decision Brown v. 3M, 265 F.3d 1349, 60 USPQ2d 1375 (Fed. Cir. 2001)

This decision found that the term "or" in claim 16 in the *at least one of two-digit, three-digit, or four-digit year-date representations* phrase is to be read in the alternative when read in light of the specification.   Page 1378 states:

The district court construed the word "or" in claim 16 as meaning that the apparatus was capable of converting "only two-digit, only three-digit, only four-digit, or any combination of two-, three-, and four-digit date-data." Slip op. at 9. We agree with this construction of the claim, for it is the plain reading of the claim text. These are not technical terms of art, and do not require elaborate interpretation. There is no basis in the specification or prosecution history for reading "or" as "and" — nor does Dr. Brown request such a reading.

The indication of allowable subject matter in claim 42 and now present in new claim 71 as well as new claims 70 and 72 is withdrawn since the broadly claimed digital ink recovery system found in claims 70-72 is met by the snapshot system described in the Collaborative Design with NetDraw article.

Claim Objections

3.   Claims 68 and 72 are objected to because of the following informalities:

Claim 68:

Lines 4 and 6 of this claim would be grammatically better if "selecting a digital

ink" were amended to be "selecting at least one digital ink" and if "fading at least one of

the selected at least one digital inks" were amended to be "fading at least one of the

selected at least one digital ink".

Claim 72:

Line 6 of this claim would be grammatically better if "fading at least one of the

selected at least one digital inks" were amended to be "fading at least one of the

selected at least one digital ink".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

5.   Claim 67 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Claim 67:

In view of the Interim Guidelines this claim does not claim statutory subject

matter. **Interim Guidelines for Examination of Patent Applications for Patent**

Subject Matter Eligibility October 26, 2005.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.p

df.

At pages 55-57 of these interim guidelines the Patent Office propose that "such signal

claims are ineligible for patent protection because they do not fall within any of the four

statutory classes of § 101. Public comment is sought for further evaluation of this

question.". Applicant is encouraged to amend or cancel this claim since it may be held

to be non-statutory.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claims 1-5, 7-25, 27-48, and 50-67are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention.

Claim 1:

This claim claims "the predetermined time being based on at least one of

appearance..., appearance..., a first stroke..., completion ..., and an intonational

phrase" which in view of Superguide, IPXL Holdings, and Brown this phrase is to be

read as at least one of A, B, C, D, and E and is not alternative, thus, this claim does not

distinctly that which is described in paragraphs 0037-0041. These paragraphs clearly

describe the fading to be based upon alternative variables. Note lines 5-9 of paragraph

0037 which clearly uses the alternative "or" to connect the two variables which are the

first two claimed appearance variables. Note lines 12-14 of paragraph 0037 which

clearly uses the alternative "or" to connect the three variables which are the last three

claimed variables (a first stroke..., completion ..., and an intonational phrase). Note line

12 of paragraph 0037 which starts with "Furthermore, it will be apparent that the fading

may start..." which alternatively connects this sentence to the previous sentence

describing fading variables in the alternative. This claim claims A, B, C, D, and E and

claims more than one of A, B, C, D, and E. The latter of which is not described in

paragraphs 0037-0041. The former of which is not described in paragraphs 0037-0041

even in light of originally filed claim 6. The specification even in light of originally filed

claim 6 does not teach how the five variables may be used together to determine the

predetermined time. Applicant should consider changing "the predetermined time

being based on at least one of" to "the predetermined time being based on one of" and

by changing "and an intonational phrase" to "or an intonational phrase" and by changing

"a first stroke of succeeding digital ink is applied" to "application of a first stroke of

succeeding digital ink". The claimed phrase "appearance of the completed digital ink

to users who did not apply the digital ink" should be changed to "appearance of a

completed digital ink to users who did not apply the digital ink" since if the list of

variables is to be alternative then "the completed digital ink" lacks antecedent basis in

the claim. It is questionable whether digital ink inherently have a completed digital ink.

The claimed phrase "completion of the succeeding digital ink" should be "completion of

a succeeding digital ink" since if the list of variables is to be alternative then "the

succeeding digital ink" lacks antecedent basis in the claim. It is also questionable

whether digital ink inherently have succeeding digital ink.

Claim 24:

This claim has similar problems that were addressed for claim 1. Applicant should

consider changing "and an intonational phrase" to "or an intonational phrase" and by

changing "a first stroke of succeeding digital ink" to "application of a first stroke of

succeeding digital ink". The claimed phrase "appearance of the completed digital ink to

users who did not apply the digital ink" should be changed to "appearance of a

completed digital ink to users who did not apply the digital ink" since if the list of

variables is to be alternative then "the completed digital ink" lacks antecedent basis in

the claim. It is questionable whether digital ink inherently have a completed digital ink.

The claimed phrase "completion of the succeeding digital ink" should be "completion of

a succeeding digital ink" since if the list of variables is to be alternative then "the

succeeding digital ink" lacks antecedent basis in the claim. It is also questionable

whether digital ink inherently have succeeding digital ink.

Claim 44:

This claim has similar problems that were addressed for claim 1. Applicant should

consider changing "the predetermined time being one of" to "the predetermined time

being based on one of" because the predetermined time is not one the listed variables

but is based upon one of the listed variables. Applicant should consider changing "ink,

an intonational phrase" to "ink, or an intonational phrase" and by changing "a first stroke

of succeeding digital ink" to "application of a first stroke of succeeding digital ink". The

claimed phrase "appearance of the completed digital ink to users who did not apply the

digital ink" should be changed to "appearance of a completed digital ink to users who

did not apply the digital ink" since if the list of variables is to be alternative then "the

completed digital ink" lacks antecedent basis in the claim. It is questionable whether

digital ink inherently have a completed digital ink. The claimed phrase "completion of

the succeeding digital ink" should be "completion of a succeeding digital ink" since if the

list of variables is to be alternative then "the succeeding digital ink" lacks antecedent

basis in the claim. It is also questionable whether digital ink inherently have succeeding

digital ink.

Claim 67:

This claim has similar problems that were addressed for claim 1. Applicant should

consider changing "and an intonational phrase" to "or an intonational phrase" and by

changing "a first stroke of succeeding digital ink" to "application of a first stroke of

succeeding digital ink". The claimed phrase "appearance of the completed digital ink to

users who did not apply the digital ink" should be changed to "appearance of a

completed digital ink to users who did not apply the digital ink" since if the list of

variables is to be alternative then "the completed digital ink" lacks antecedent basis in

the claim. It is questionable whether digital ink inherently have a completed digital ink.

The claimed phrase "completion of the succeeding digital ink" should be "completion of

a succeeding digital ink" since if the list of variables is to be alternative then "the

succeeding digital ink" lacks antecedent basis in the claim. It is also questionable

whether digital ink inherently have succeeding digital ink.

Claims 4, 9, 10, 11, 21, 30, 31, 32, 41, 47, 52, 53, 54, and 64:

These claims also claim "at least one of", therefore they are indefinite for the same

reasons given above. This phrase claims more than one of the listed variables be used

in making the claimed determination and the specification does not describe using more

than one of the listed variables in making the determination. In fact the specification

may only describe using one of the listed variables in making the determination. For

example in claim 4 the second determination is determined based upon five variables.

It is based upon one occurrence of the five variables and upon several occurrences of

the five variables. The specification does not describe using several occurrences of the

five variables. Thus, this claim should be amended to claim "the second condition is

based upon one of user specification, ...". Also the specification seems to be silent

about "user identification". If applicant wishes to continue to claim this then the

specification should be amended. Note that similar claim 47 has the same issues

present in claim 4. In claims 21, 41, and 64 "shape of the selected digital inks" is

claimed, however, the specification does not mention this, thus, if applicant wishes to

continue to claim this then the specification should be amended to describe this attribute

of the digital ink.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 70-72 are rejected under 35 U.S.C. 102(b) as being anticipated by the

article by Dongqiu Qian and M. D. Gross describing NetDraw titled Collaborative Design

with NetDraw, 1999, Proceedings of Computer Aided Architectural Design (CAAD)

Futures '99, Georgia Institute of Technology, Atlanta, Georgia, USA, June 7-8, 1999

pp213-226 which may be found at:

http://depts.washington.edu/dmgftp/publications/pdfs/caadfutures99-netdraw.pdf

and
http://dmg.caup.washington.edu/xmlSiteEngine/browsers/static/publication29.html

This article describes on page 6 :

> • NetDraw also records snapshots of the drawing, which a designer can
> play back to review the history of a design process. It can be set to record
> snapshots at regular intervals, or only to record them on command.

NetDraw provides two collaborative functions: Draw and Chat. NetDraw's
drawing features include: object based graphical editing, gestures that
fade away over time, graphical underlay, grouping and graphical
constraints, and recording design history snapshots. NetDraw's text-based
chat offers a substitute for face-to-face conversation or video links. Figure
1 shows the chat window. At the top is a oneline type-in area; on the
bottom a multi-line text field displays the conversation transcript.
Whenever one user types a sentence, it appears on the screens of all
other users. NetDraw prefaces each sentence with the author's name.

This article describes on page 7:

By clicking on the saved snapshots, designers can quickly
review a previous state of the design history.

NetDraw can also use a graphical image as the background of the
drawing surface. The image may reside on the local machine or on any
Web server. This image could be a topographic base map or a sketched
design drawing imported from another program. The designer can link
objects with descriptive text. The text can simply indicate the object's
name, e.g. "table", "kitchen", or it can provide information about the object.
Each user also controls whether to display the text associated with each
object. Besides the normal graphical objects offered by other drawing
packages, NetDraw also provides a 'gesture' object. A designer can draw
a gesture on the drawing surface; like other drawing objects, it will appear
on every other designer's screen. However, unlike ordinary drawing
objects, gesture objects are temporary; they fade away over a short period
of time. Designers can draw attention to a specific area of the drawing
surface with a gesture. A designer can use a gesture object not only to
draw attention, but also to discuss their design concepts with others.

Figure 2 illustrates two snapshots with the lower snapshot showing ink that is not

present in the upper snapshot. Thus, the snapshot engine is a recovery system that

recovers ink as well as the rest of the drawing.

An analysis of the claims follows.

Claim 71 broadly claim a digital ink recovery system which is met by the recording the

snapshots of the drawing as the digital ink is being displayed on the drawing. Claims 70

and 72 broadly claim "selecting a faded or fading digital ink" and ""recovering the

selected faded or fading ink" which feature is fairly taught by the article since the

selected snapshot icon has digital ink the is fading or faded from the current drawing.

Further amendments to claims 70-72 are necessary to distinguish the claims from

NetDraw. Recovery is discussed in applicants paragraphs 0050, 0055, and 0070 which

are reproduced below. Emphasis is being added to paragraph 0050 to emphasize that

applicant intends the claim to broadly claim selecting the digital ink such as by selecting

a snapshot icon. It should be noted that paragraph 0055 discusses enabling the first

user of device 10 and the second user of device 20 to be able to recover the digital ink,

however, this is taught by Netdraw since several devices will display the snapshot icons

allowing each user to recover that snapshot.

[0050] The digital ink recovery circuit 233 allows the user to recover the fading or faded
digital ink. For example, the users may desire to recover a fading digital ink while it is
fading or after it has faded. To do so, the user selects the fading or faded digital ink,
clicks on the fading ink or uses any other known or later developed method of selecting.
At this time, the digital ink may become a non-temporary digital ink or start fading after a
predetermined time.

[0055] According to various exemplary embodiments according to this invention, once
the digital ink starts to fade the user of first user device 10 and/or user of second user
device 20 can recover the digital ink to the original state by selecting it. For example,
highlight 730 may be selected by clicking on the remaining unfaded digital ink. However,
it will be apparent that any other known or later developed technique of selection may
be used.

[0070] If it is determined in step S1900 that the digital ink is to be recovered, control continues to step S2200. In step S2200, the digital ink is recovered by, for example, returning the fading or faded digital ink to the state before the fading occurred, e.g. color depth and/or thickness. Control then continues to step S2300.

Allowable Subject Matter

8.   Claims 1-5, 7-25, 27-48, and 50-66 would be allowable if rewritten to overcome

the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. The

prior art of record fails to teach or suggest the five variables alternatively used to

determine the predetermined time. See applicant remarks filed on 9/28/2005 at pages

14 and 15.

9.   Claim 68 would be allowable if amended to overcome the objection.

The prior art of record fails to teach or suggest wherein the predetermined speed

depends on an importance determination of a word in the media marked by the digital

ink.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Roman, G.-C.; Cox, K.C.; Program Visualization: The Art Of Mapping Programs To

Pictures International Conference on Software Engineering, May 11-15, 1992

pages:412 – 420.

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-

7656. The examiner can normally be reached on M-F from 7:00 to 3:30. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael

Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization

where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jeffery A Brier
Primary Examiner
Art Unit 2672